



The EU Framework Programme for Research and Innovation

HORIZON 2020

SC6

CULT-COOP-2014-2017



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DG Connect Unit G2 Luxembourg

CONNECT-G2

Data Applications and Creativity



The 'Creativity' unit covers a range of activities from funding leading-edge ICT research to innovation and policy support.

The image features a central lens containing a small globe of Earth, positioned above a larger, blue-tinted horizon of the Earth. A bright light source behind the lens creates a lens flare effect with multiple rays of light extending across the scene. The text 'HORIZON 2020' is written in a clean, white, sans-serif font, with the lensed globe acting as the letter 'O' in 'HORIZON'.

HORIZON 2020

Year 1 3D tools

2014

H2020 - Reflective 3D

a) RESEARCH ON COST-EFFECTIVE TECHNOLOGIES FOR ADVANCED 3D MODELLING TO ENHANCE THE UNDERSTANDING OF CULTURAL HERITAGE – Research and Innovation actions.



Target:

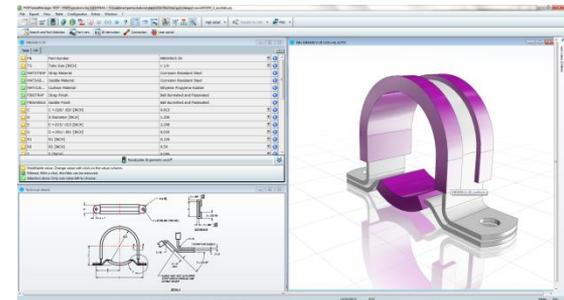
- New methods and tools for automated 3D modelling and analysis of physical cultural resources and assets beyond simple digital reconstruction. High-fidelity models of objects (surface; transparency; dimensions etc.)

H2020 Reflective 3D

b) DEVISE STANDARD FORMATS FOR THE SEMANTIC-AWARE 3D MODELLING OF EUROPE'S CULTURAL HERITAGE FOR RESEARCHERS AND PRACTITIONERS – Coordination and Support actions.

Target:

- **Extend or develop standard formats of 3D semantic-aware objects with a view to improve their archiving and reusability.**
- **The proposed formats should enable easy exchange and use of 3D models that have been acquired or generated by a wide range of devices or software.**



Year 2

**INNOVATION
ECOSYSTEMS OF
DIGITAL CULTURAL
ASSETS**

2015

H2020 Innovation ecosystems of digital cultural assets

Specific Challenge:

Show how digital cultural resources can promote creativity and generate innovation in research design and methodology, lead to richer interpretations of the past, bring new perspectives to questions of identity and culture, and generate societal and economic benefits.



Innovation ecosystems of digital cultural assets

Scope:

Support and promote access to and reuse of digital cultural heritage resources (available in scientific collections, archives, museums, libraries and cultural heritage sites)



Innovation ecosystems of digital cultural assets

Collaboration:



They should illustrate how they allow new research questions to be formulated on the basis of cross-collaboration and/or stimulate **cross-border, cross-lingual multi-disciplinary** reuse of Europe's cultural heritage, enabling collaboration and partnerships and co-production of knowledge **across sectors** and communities of researchers and users.

Year 3 Virtual Museum 2016

CULT-COOP-08-2016

The challenge will be to give further emphasis on improving access, establishing meaningful narratives for collections and displays and story-led interpretation by the development of VM.

CULT-COOP-08-2016



a)

Therefore, actions will focus on the development of **highly innovative technologies, methods and ICT tools to significantly improve the 'digital encounter' including quality of images, sonic narratives, the display and interactivity with digital objects.** Besides, actions should research and create new ways of personalised storytelling, interactivity and adaptive guidance, bridging the physical and the digital world.

CULT-COOP-08-2016

b)



The scope of this action is to develop and maintain a sustainable platform engaging a large number of key actors, stakeholders and communities of practices on how to improve the collaboration and comprehension among the entire community, in order to build up a common roadmap for future activities and explore how these new encounters can be evaluated to understand the models.

The platform will concretise its action through the organisation of workshops, conferences or any other awareness-raising actions.

Results so far

YEARS	Nb of proposals		Selected	
2014	90	a)	4	10 M€
	4	b)	0	
2015	132		4	10 M€
2016	90	a)	4	10 M€
	10	b)	1	1 M€

H2020–Reflective–6-2015: Innovation ecosystems of digital cultural assets

CROSSCULT, ArchAIDE, I-Media-Cities, ARCHES.

H2020–Reflective–7-2014: Advanced 3D modelling for accessing and understanding European cultural assets

INCEPTION, GRAVITATE, Scan4Reco, DigiArt

H2020–Cult–Coop–8-2016: Virtual museums and social platform on European digital heritage, memory, identity and cultural interaction

GIFT, PLUGGY, EMOTIVE, iMARECULTURE

VIMM

Year 4 Semantic Gap

2017

So obvious for us....



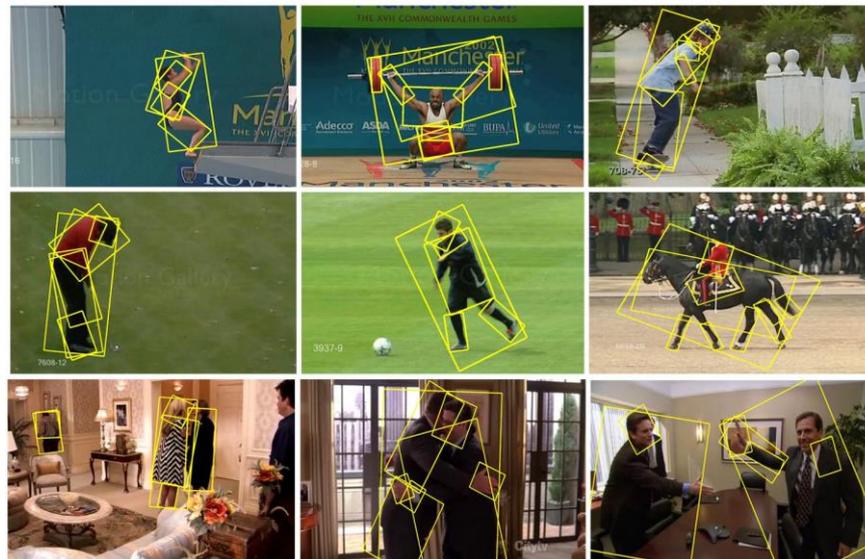
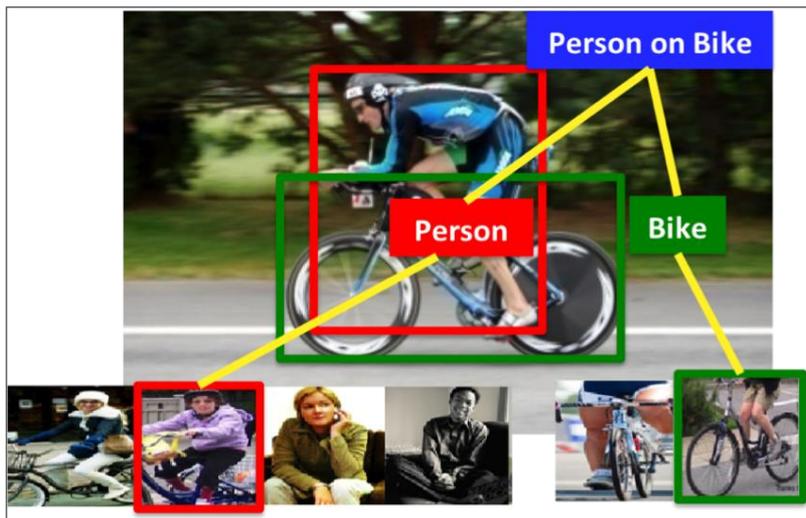
But for a computer?





European
Commission

AUTOMATIC Computer recognition



Access to unknown content.



Provide an ID to cultural object.



Access to museum reserve.

SCOPE

This should be achieved by tackling issues such as **automatic contextualisation and identification** of content and by developing analytical tools, including methods for automatically finding content which is semantically similar to a given item, or content which is related to a given high-level concept. This aspect also calls for fundamental work related to the philosophy of meta-data designs especially of language-based data that should be in close coherence with the architecture and typology of human conceptual systems. Actions should also **develop innovative tools and methods to extract meaning from digital artefacts** (including video recordings, audio recordings, digital images, text, multispectral and thermal information and 3D representations of objects or scenes) considering also the spatio-temporal dimension and the quality of the digital content in order to allow the study and preservation of European heritage.

IMPACT

New ways of taking into account the state of the art in computer science and big data management, of searching European digital content which used to be inaccessible, buried among huge amounts of data and not sufficiently tagged with adequate metadata.

Improve the understanding of the rich diversity of European cultural heritage and create added value for the society by providing humanities researchers, journalists, policy makers and the interested public with new ways of finding answers to their questions about European cultural heritage and history.

CULT-COOP-09-2017: European cultural heritage, access and analysis for a richer interpretation of the past.

PROGRAMME AVAILABLE AT

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-societies_en.pdf

CULT-COOP-09-2017

a) Research and Innovation actions. 9M€

CALENDAR CULT-COOP-09-2017 (indicative)

Publication date: 04/10/2016

Deadline: 02/02/2017



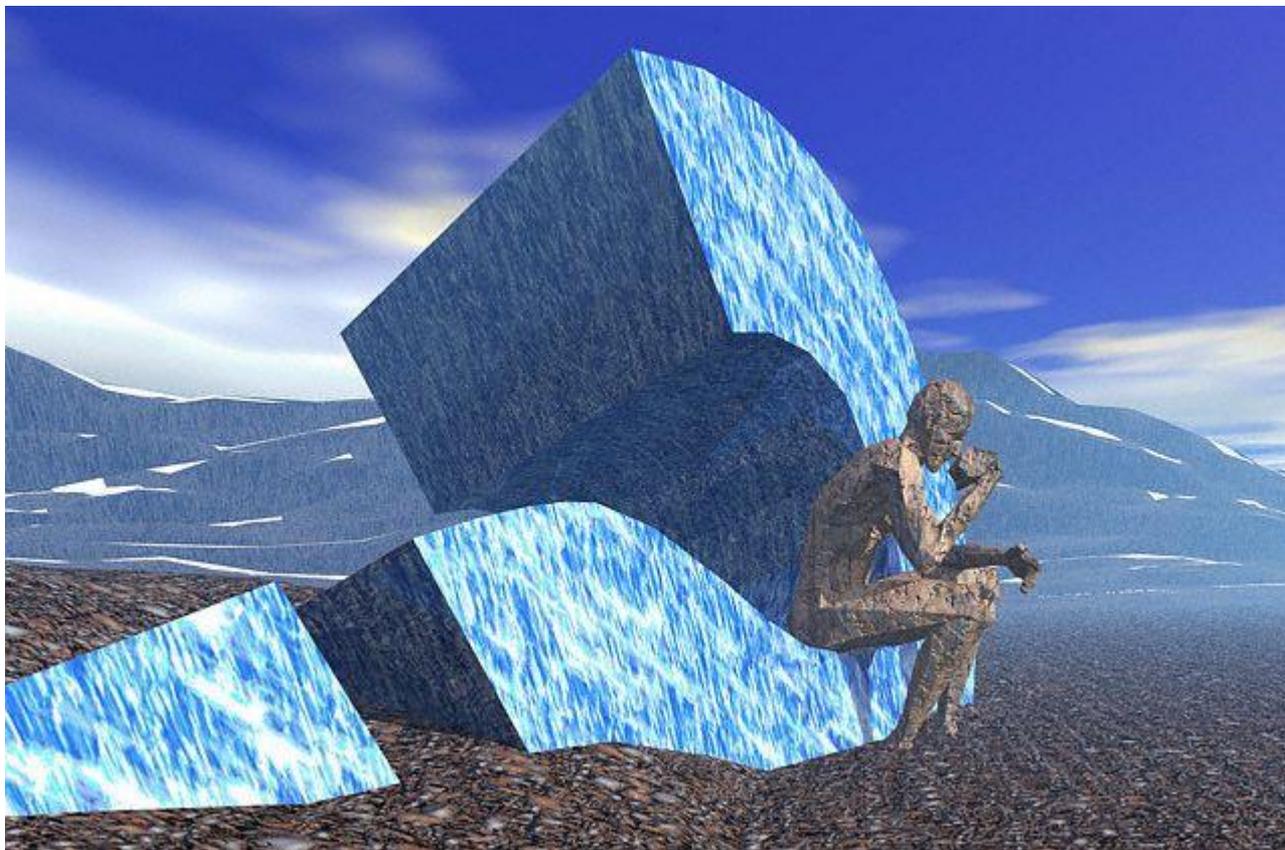
2018 ??????????

2019 ??????????

2020 ??????????



European
Commission



Research and
Innovation